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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,857	06/27/2001	Michael Lee	020174005000	3695

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06/18/2003

Townsend and Townsend and Crew LLP
8th Floor
Two Embarcadero Center
San Francisco, CA 94111

EXAMINER

LEE, WILSON

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/894,857

Applicant(s)

LEE ET AL.

Examiner

Wilson Lee

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 52-75 and 78-80 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-22, 24-35, 37-51, 76 and 77 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 23 and 36 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections – 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 23, line 3, “a via” is not clear what exactly it is because it is not a noun.

Regarding Claim 36, line 9, “a via” is not clear what exactly it is because it is not a noun.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by
Parce et al. (6,149,870) cited in IDS filed on 2/4/02.

Regarding Claim 1, Parce discloses a method comprising placing a first
component of the plurality of micro-fluidic components (See Col. 2, lines 1-23), wherein

the plurality of micro-fluidic components comprise multi-layered components (See Col. 4, lines 44-53); placing a second component of the plurality of micro-fluidic components; and connecting (by main channel 104) the first component to the second component (See Figure 1).

Regarding Claim 2, Parce discloses that multi-layered component includes a control channel (302, 304) (adjusting the resistance on the channel controls the amount of fluid flow; see Col. 11, lines 35-50) on a control layer and a fluid channel (A, B) on a fluid layer.

Regarding Claim 3, Parce discloses that a multi-layered component includes an active component (e.g. pump, valve) (See Col. 6, lines 8-24).

Regarding Claim 4, Parce discloses that a multi-layered component includes depth information (See Col. 4, lines 38-40).

Regarding Claim 5, Parce discloses that the plurality of micro-fluidic components comprises structures having elastomeric material (e.g. plastic) (See Col. 18, lines 20-28).

Regarding Claim 7, Parce discloses that the connecting uses a passive component comprising a channel on a single layer (See Col. 4, lines 44-53).

Claim 36, as best understood, is rejected under 35 U.S.C. 102(e) as being anticipated by Parce et al. (6,149,870).

Regarding Claim 36, Parce discloses a method comprising placing a component of the plurality of micro-fluidic components on a first layer of a plurality of layers, the component comprising a first fluid channel (A) (See Col. 3, line 13, Col. 11, lines 49-50)

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and a first control channel (302, 304) (See Col. 11, lines 35-50); placing a second fluid channel (B) (See Col. 11, lines 49-50) on a second layer of the plurality of layer (See Col. 4, lines 44-53).

Allowable subject matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-22, 24-35, 37-51, 76 and 77 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art neither discloses nor suggests such method comprising a step of selecting a template such as required by claim 8, a step of selecting a template comprising an I/O port such as required by claim 32, a step of selecting a template comprising a plurality of layers such as required by claim 37, and such computer program product comprising a code for selecting a template such as required by claim 76.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Claims 52-75, 78-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kennedy (6,048,498) discloses a micro-fluidic devices and systems.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (703) 306-3426. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956. Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.



Wilson Lee
Patent Examiner
U.S. Patent & Trademark Office

WL
6/16/03